

## REMARKS

In the Official Action mailed on **22 August 2007**, the Examiner reviewed claims 1-3, 5, 7-14, 16, and 18-36. Claims 1-3, 5, 7-14, 16, and 18-36 were rejected under 35 U.S.C. § 103(a) based on Frey, Jr. et al (USPN 5,201,044, hereinafter “Frey”), and Flemming (USPN 6,023,772, hereinafter “Flemming”).

### Rejections under 35 U.S.C. §103(a)

Examiner has rejected independent claims 1, 12, and 23 as being unpatentable over Frey in view of Fleming. Applicant respectfully disagrees.

Applicant respectfully submits that, **when the file operations are non-idempotent**, embodiments of the present invention **log only a subset of the file operations; this subset comprises file/directory operations such as create, remove, rename, link, symbolic link, make directory and remove directory** (see page 9, lines 4-9 of the instant application).

This is beneficial because the invention particularly recognizes that certain non-idempotent operations can be replayed in the case of failure, and ensures this replay occurs by logging these operations, even though they are non-idempotent. This is also beneficial because the invention does a more compact logging operation, instead of logging every file operation, idempotent or non-idempotent (see page 9, lines 10-14 of the instant application).

Applicant respectfully points out that Frey discloses that the transaction log file keeps track of **all transactions as they are carried out** (see Frey, col. 5, lines 2-4). Applicant also respectfully points out that Fleming discloses running a replicate process that shadows the live process, “logging to each secondary processing entity ... update information for enabling the replicate ... process ...to update its state to track the state of the primary process” (see Fleming, col. 3, lines

28-33). Therefore, Applicant respectfully submits that there is nothing within Frey or Fleming, either separately or in concert, which teaches distinguishing between idempotent and non-idempotent operations, ensuring that certain non-idempotent operations may be replayed if necessary, and therefore ensuring that they are logged, while not logging other non-idempotent operations.

Accordingly, Applicant has amended independent claims 1, 12, and 23 to clarify that the present invention teaches logging only a subset of file operations that are non-idempotent, where this subset comprises file/directory operations such as create, remove, rename, link, symbolic link, make directory and remove directory. This is supported by lines 4-9 in page 9 of the instant application. No new matter has been added.

Hence, Applicant respectfully submits that independent claims 1, 12, and 23 as presently amended are in condition for allowance. Applicant also submits that claims 2, 5, 7-11, and 34, which depend upon claim 1, claims 13, 16, 18-22, and 35, which depend upon claim 12, and claims 24, 27, 29-33, and 36, which depend upon claim 23, are for the same reasons in condition for allowance and for reasons of the unique combinations recited in such claims.

### **CONCLUSION**

It is submitted that the present application is presently in form for allowance. Such action is respectfully requested.

Respectfully submitted,

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